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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,174	10/09/2003	Koichi Ono	03-637	2630

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EXAMINER	
VATHYAM, SUREKHA	
ART UNIT	**PAPER NUMBER**
1753	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/684,174	ONO, KOICHI	
	Examiner	Art Unit	
	Surekha Vathyam	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/21/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It improperly identifies the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, as P2002-301140 instead of JP2002-301140.

Specification

2. The disclosure is objected to because of the following informalities:

In the Specification:

Page 5, line 36, "by the injection molding" should be replaced with - - by injection molding - -.

Page 6, line 31, "plate2has" should be replaced with - - plate 2 has - -.

Page 8, line 1, "by the injection molding" should be replaced with - - by injection molding - -.

Page 10, line 15, "grooves 5 and 5" should be replaced with - - grooves 5 and 6 - -.

In the Claims:

Claim 1, line 11, "easily pass" should be replaced with - - easily passes - -.

In the Abstract:

Page 15, line 4, "by the injection molding" should be replaced with - - by injection molding - -.

Page 15, line 16, "so thicker" should be replaced with - - so thick - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 3 recites the limitation "the same resin material" in line 2 of claim 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (JP 11-083798).

Regarding claim 1, Nakamura ('798) discloses a resin chip comprising: a first member (2) having a groove on one side thereof (4), said groove having a fine cross section and a predetermined length (see Drawing 2), said groove having a region which is to be irradiated with light (see Drawing 5); and a second member (1) fixed to said one side of said first member, wherein said first member has a recessed portion (6) on the other side thereof, which is opposite to said one side, in at least said region (see Drawings 4 and 6), said groove having a bottom portion having such a thickness that light easily pass through the bottom portion ([0023]).

Regarding claim 2, Nakamura ('798) discloses the resin chip, wherein said recessed portion (6) has a side wall serving as a condensing wall for reflecting irradiating light toward a bottom face of said recessed portion (see Drawing 4 and 6).

8. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Katsura et al. (JP 07-306181).

Regarding claim 1, Katsura ('181) discloses a resin chip comprising: a first member (61) having a groove (610) on one side thereof, said groove having a fine cross section and a predetermined length (see Drawing 3), said groove having a region which is to be irradiated with light (see Drawings 1, 2 and 15 and [0019]); and a second

member (4) fixed to said one side of said first member (see Drawing 2), wherein said first member has a recessed portion (612) on the other side thereof, which is opposite to said one side (see Drawing 13), in at least said region, said groove having a bottom portion having such a thickness that light easily pass through the bottom portion ([0031] – [0034] and [0045]).

Regarding claim 2, Katsura ('181) discloses the resin chip wherein said recessed portion has a side wall serving as a condensing wall for reflecting irradiating light toward a bottom face of said recessed portion (see Drawing13).

9. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Staats (WO 2002/061400 A1).

Regarding claim 1, Staats ('400) discloses a resin chip comprising: a first member (122) having a groove (108) on one side thereof (page 7, lines 11 – 17), said groove having a fine cross section and a predetermined length (see fig. 4, view A), said groove having a region which is to be irradiated with light (see fig. 1 and page 6, lines 4 – 17); and a second member fixed to said one side of said first member (page 4, lines 20 – 22), wherein said first member has a recessed portion on the other side thereof (see fig. 4, view B), which is opposite to said one side, in at least said region, said groove having a bottom portion having such a thickness that light easily pass through the bottom portion (page 8, lines 7 – 12).

Regarding claim 2, Staats ('400) discloses the resin chip wherein said recessed portion has a side wall serving as a condensing wall for reflecting irradiating light toward a bottom face of said recessed portion (see fig. 4, view B).

10. Claims 1 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ashmead et al. (US 5,534,328).

Regarding claim 1, Ashmead ('328) discloses a resin chip comprising: a first member (700, 800, 900 or 1000) having a groove on one side thereof (see figs. 2 – 5 and figs. 11 – 15 and column 2, lines 62 – 64 and column 3, line 65 – column 4, line 11), said groove having a fine cross section and a predetermined length (column 2, lines 64 – 67), said groove having a region which is to be irradiated with light (column 13, lines 7 – 10 and column 15, lines 30 – 34); and a second member (800, 900, 1000 or 1100) fixed to said one side of said first member (column 15, lines 26 – 30), wherein said first member has a recessed portion on the other side thereof (see figs. 4 and 5), which is opposite to said one side, in at least said region, said groove having a bottom portion having such a thickness that light easily pass through the bottom portion (column 15, lines 30 – 34).

Regarding claim 2, Ashmead ('328) discloses the resin chip wherein said recessed portion has a side wall serving as a condensing wall for reflecting irradiating light toward a bottom face of said recessed portion (see figs. 4 and 5).

Regarding claim 3, Ashmead ('328) discloses the resin chip wherein said first member is formed of the same resin material as that of said second member (column 2, line 67 – column 3, line 23).

Regarding claim 4, Ashmead ('328) discloses the resin chip wherein said first member is formed by injection molding (column 3, lines 51 – 62).

Regarding claim 5, Ashmead ('328) discloses a resin chip comprising: a first resin member (700, 800, 900 or 1000) having an elongated groove on one side thereof (see figs. 2 – 5 and figs. 11 – 15 and column 2, lines 62 – 64 and column 3, line 65 – column 4, line 11), said groove having a fine cross section (column 2, lines 64 – 67), at least a part of said groove being arranged in a light irradiation region which is to be irradiated with light (column 13, lines 7 – 10 and column 15, lines 30 – 34); and a second resin member (800, 900, 1000 or 1100), fixed to said one side of said first resin member, for covering said groove (column 3, lines 32 – 50), wherein said first resin member has a recessed portion on the other side thereof (see figs. 4 and 5), said recessed portion being associated with said groove for allowing light to easily pass through said first and second resin members in said light radiation region portion (column 15, lines 30 – 34).

Regarding claim 6, Ashmead ('328) discloses the resin chip wherein said recessed portion is arranged in said light irradiation region (see figs. 1, 4 and 5).

Regarding claim 7, Ashmead ('328) discloses the resin chip wherein said groove has a groove width of about ten to two hundreds micrometers, and a groove depth of about ten to two hundreds micrometers (column 2, lines 64 – 67).

Regarding claim 8, Ashmead ('328) discloses the resin chip wherein said first resin member has a sample receiving hole (20, 24) which communicates with said groove (see figs. 1 and 5).

Regarding claim 9, Ashmead ('328) discloses the resin chip wherein said recessed portion has a side wall serving as a condensing wall for reflecting light toward said groove in said light irradiation region (see figs. 4 and 5).

Regarding claim 10, Ashmead ('328) discloses the resin chip wherein said first resin member is formed of the same resin material as that of said second member (column 2, line 67 – column 3, line 23).

Regarding claim 11, Ashmead ('328) discloses the resin chip wherein said first resin member is formed by injection molding (column 3, lines 51 – 62).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claims 3 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (JP 11-083798) in view of Ashmead et al. (US 7,150,815).

Nakamura ('798) discloses the resin chip as discussed with regards to claim 1 above. Regarding claim 3, Nakamura ('798) discloses the resin chip wherein said first member is formed of the same material as that of said second member ([0028]). Nakamura ('798) does not explicitly disclose the material to be a resin.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Nakamura ('798) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 4, Ashmead ('815) teaches a resin chip wherein a first member is formed by injection molding (column 8, line 33 – column 9, line 45).

Regarding claim 5, Nakamura ('798) discloses a resin chip comprising: a first member (2) having an elongated groove (4) on one side thereof (see Drawings 1 and 2), said groove having a fine cross section (see Drawing 2), at least a part of said groove being arranged in a light irradiation region which is to be irradiated with light (see Drawing 5); and a second member (1), fixed to said one side of said first resin member (see Drawing 1), for covering said groove ([0015]), wherein said first member has a recessed portion (6) on the other side thereof (see Drawings 4 and 6), said recessed portion being associated with said groove for allowing light to easily pass through said first and second members in said light radiation region ([0023]).

Nakamura ('798) does not explicitly disclose the first and second member being formed of a resin.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Nakamura ('798) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially

transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 6, Nakamura ('798) discloses the resin chip wherein said recessed portion is arranged in said light irradiation region ([0023]).

Regarding claim 7, Ashmead ('815) teaches a resin chip wherein said groove has a groove width of about ten to two hundreds micrometers, and a groove depth of about ten to two hundreds micrometers (column 5, lines 52 – 60).

Regarding claim 8, Nakamura ('798) discloses the resin chip wherein said first member (2) has a sample receiving hole (5a, 5b, 5c and 5d) which communicates with said groove (see Drawings 1 and 2).

Regarding claim 9, Nakamura ('798) discloses the resin chip wherein said recessed portion (6) has a side wall serving as a condensing wall for reflecting light toward said groove in said light irradiation region (see Drawings 4 and 6).

Regarding claim 10, Nakamura ('798) discloses the resin chip wherein said first member is formed of the same material as that of said second member ([0028]). Nakamura ('798) does not explicitly disclose the material to be a resin.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Nakamura ('798) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus

making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 11, Ashmead ('815) discloses a resin chip wherein a first resin member is formed by injection molding (column 8, line 33 – column 9, line 45).

14. Claims 3 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsura et al. (JP 07-306181) in view of Ashmead et al. (US 7,150,815).

Katsura ('181) discloses the resin chip as discussed with regards to claim 1 above. Regarding claim 3, Katsura ('181) discloses the second member formed of resin ([0025]). Katsura ('181) does not explicitly disclose the first and second member formed of the same resin material.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Katsura ('181) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 4, Ashmead ('815) teaches a resin chip wherein a first member is formed by injection molding (column 8, line 33 – column 9, line 45).

Regarding claim 5, Katsura ('181) discloses a resin chip comprising: a first member (61) having an elongated groove (610) on one side thereof (see Drawings 1 and 2), said groove having a fine cross section (see Drawings 2 and 3), at least a part of said groove being arranged in a light irradiation region which is to be irradiated with light (see Drawing 15); and a second resin member (4), fixed to said one side of said first member (see Drawing 2), for covering said groove ([0025]), wherein said first member has a recessed portion (612) on the other side thereof (see Drawing 13), said recessed portion being associated with said groove for allowing light to easily pass through said first and second members in said light radiation region ([0045] – [0046]).

Katsura ('181) does not explicitly disclose the first member being formed of a resin.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Katsura ('181) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially

transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 6, Katsura ('181) discloses the resin chip wherein said recessed portion is arranged in said light irradiation region ([0045] – [0046]).

Regarding claim 7, Katsura ('181) discloses the resin chip wherein said groove has a groove width of about ten to two hundreds micrometers, and a groove depth of about ten to two hundreds micrometers ([0025]).

Regarding claim 8, Katsura ('181) discloses the resin chip wherein said first member (61) has a sample receiving hole which communicates with said groove (see Drawing 14 and [0002]).

Regarding claim 9, Katsura ('181) discloses the resin chip wherein said recessed portion (612) has a side wall serving as a condensing wall for reflecting light toward said groove in said light irradiation region (see Drawing 13).

Regarding claim 10, Katsura ('181) discloses the resin chip wherein said second member (4) is formed of a resin material ([0025]). However, Katsura ('181) does not explicitly disclose the first member is formed of the same resin material as that of said second member.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Katsura ('181) and substitute the material of the first and second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides

numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 11, Ashmead ('815) discloses a resin chip wherein a first resin member is formed by injection molding (column 8, line 33 – column 9, line 45).

15. Claims 3 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staats (WO 2002/061400 A1) in view of Ashmead et al. (US 7,150,815).

Staats ('400) discloses the resin chip as discussed with regards to claim 1 above. Regarding claim 3, Staats ('400) discloses the resin chip wherein said first member is formed of a resin material (page 8, lines 6 – 9). Staats ('400) discloses a second member (page 4, lines 20 – 22) but does not explicitly disclose it formed of the same resin material.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Staats ('400) and substitute the material of the first and second member with the same resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence

background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 4, Ashmead ('815) teaches a resin chip wherein a first member is formed by injection molding (column 8, line 33 – column 9, line 45).

Regarding claim 5, Staats ('400) discloses a resin chip comprising: a first resin (page 8, lines 6 – 9) member (122) having an elongated groove (108) on one side thereof (page 7, lines 11 – 17), said groove having a fine cross section (see fig. 4, view A), at least a part of said groove being arranged in a light irradiation region which is to be irradiated with light (see fig. 1 and page 6, lines 4 – 17); and a second member, fixed to said one side of said first resin member, for covering said groove (page 4, lines 20 – 22), wherein said first resin member has a recessed portion on the other side thereof (see fig. 4, view B), said recessed portion being associated with said groove for allowing light to easily pass through said first and second members in said light radiation region (page 8, lines 7 – 12).

Staats ('400) does not explicitly disclose the second member formed of a resin material.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of a resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Staats ('400) and substitute the material of the second member with a resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous

benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 6, Staats ('400) discloses the resin chip wherein said recessed portion is arranged in said light irradiation region (see fig. 4, view B).

Regarding claim 7, Ashmead ('815) teaches a resin chip wherein said groove has a groove width of about ten to two hundreds micrometers, and a groove depth of about ten to two hundreds micrometers (column 5, lines 52 – 60).

Regarding claim 8, Staats ('400) discloses the resin chip wherein said first resin member has a sample receiving hole which communicates with said groove (see fig. 1 and page 6, lines 20 – 23).

Regarding claim 9, Staats ('400) discloses the resin chip wherein said recessed portion has a side wall serving as a condensing wall for reflecting light toward said groove in said light irradiation region (see fig. 4, view B).

Regarding claim 10, Staats ('400) discloses the resin chip wherein said first resin member is formed of a resin material (page 8, lines 6 – 9). Staats ('400) does not explicitly disclose the second member formed of the same resin material.

Ashmead ('815) teaches a resin chip comprising a first and second member formed of the same resin material (column 9, lines 22 – 45).

It would have been obvious to one of ordinary skill in the art to modify the resin chip of Staats ('400) and substitute the material of the first and second member with the

same resin as taught by Ashmead ('815) because as Ashmead explains the resin provides numerous benefits in the field of microfluidics especially, being injection moldable thus making it inexpensive to manufacture (column 4, lines 16 – 20) and being substantially transparent at ultraviolet wavelengths and having a low fluorescence background at visible wavelengths thus improving optical detection of analytes (column 5, lines 4 – 11).

Regarding claim 11, Ashmead ('815) discloses a resin chip wherein a first resin member is formed by injection molding (column 8, line 33 – column 9, line 45).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Surekha Vathyam whose telephone number is 571-272-2682. The examiner can normally be reached on 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SV
January 25, 2007

NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700